

III. AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Original): A method of automated sample processing comprising the steps of:
establishing a first stand alone automated sample processing system having an automated process operation capability that causes automated process operation events through first robotic sample process functions;
establishing at least a second stand alone automated sample processing system having an automated process operation capability that causes automated process operation events through second robotic sample process functions;
establishing an isolated electrical connection among said first stand alone automated sample processing system and said second stand alone automated sample processing system; and
automatically processing at least one sample through operation of said first robotic sample process functions; and
automatically processing at least one sample through operation of said second robotic sample process functions.
2. (Original): A method of automated sample processing as described in claim 2 wherein said step of establishing an isolated electrical connection among said first stand alone automated sample processing system and said second stand alone automated sample processing system comprises the step of utilizing an intermediate computer functionality.
3. (Original): A method of automated sample processing as described in claim 2 wherein said step of automatically processing at least one sample through operation of said first robotic sample process functions comprises the step of

responding to said intermediate computer functionality, and wherein said step of automatically processing at least one sample through operation of said second robotic sample process functions comprises the step of responding to said intermediate computer functionality.

4. (Original): A method of automated sample processing as described in claim 3 wherein said step of automatically processing at least one sample through operation of said first robotic sample process functions comprises the step of repetitively responding to said intermediate computer functionality, and wherein said step of automatically processing at least one sample through operation of said second robotic sample process functions comprises the step of repetitively responding to said intermediate computer functionality.
5. (Original): A method of automated sample processing as described in claim 2 wherein said step of utilizing an intermediate computer functionality comprises the step of utilizing a separate full function computer programmed for operation with an automated slide processing system.
6. (Original): A method of automated sample processing as described in claim 5 wherein said step of utilizing an intermediate computer functionality comprises the step of utilizing a server functionality.
7. (Currently amended): A method of automated sample processing as described in claim 1 [[or 5]] and further comprising the step of interacting between said first stand alone automated sample processing system and said second stand alone automated sample processing system.
8. (Original): A method of automated sample processing as described in claim 7 wherein said step of interacting between said first stand alone automated sample processing system and said second stand alone automated sample processing system comprises the step of communicating processing data between said first

stand alone automated sample processing system and said second stand alone automated sample processing system.

9. (Original): A method of automated sample processing as described in claim 1 wherein said step of establishing a first stand alone automated sample processing system having an automated process operation capability that causes automated process operation events through first robotic sample process functions comprises the step of establishing a first automated slide processing system, and wherein said step of establishing at least a second stand alone automated sample processing system having an automated process operation capability that causes automated process operation events through second robotic sample process functions comprises the step of establishing a second automated slide processing system.

10. (Original): A method of automated sample processing as described in claim 9 wherein said step of automatically processing at least one sample through operation of said first robotic sample process functions comprises the steps of:
arranging a plurality of slides on a carrier retainment assembly;
applying a reagent to said plurality of slides; and
automatically staining said plurality of slides,

and wherein said step of automatically processing at least one sample through operation of said second robotic sample process functions comprises the steps of:

arranging a plurality of slides on a carrier retainment assembly;
applying a reagent to said plurality of slides; and
automatically staining said plurality of slides.

11. (Original): A method of automated sample processing as described in claim 10 wherein said step of establishing an isolated electrical connection among said first stand alone automated sample processing system and said second stand alone

automated sample processing system comprises the step of utilizing an intermediate computer functionality.

12. (Original): A method of automated sample processing as described in claim 11 wherein said step of utilizing an intermediate computer functionality comprises the step of utilizing a separate full function computer programmed for operation with an automated slide processing system.
13. (Original): A method of automated sample processing as described in claim 12 wherein said step of utilizing an intermediate computer functionality comprises the step of utilizing a server functionality.
14. (Original): A method of automated sample processing as described in claim 13 and further comprising the step of establishing a plurality of client functionalities connected to said isolated electrical connection.
15. (Currently amended): A method of automated sample processing as described in claim 1, ~~5, or 10~~ wherein said step of establishing an isolated electrical connection among said first stand alone automated sample processing system and said second stand alone automated sample processing system comprises the step of establishing a scalable connection among said first stand alone automated sample processing system and said second stand alone automated sample processing system.
16. (Original): A method of automated sample processing as described in claim 15 wherein said step of establishing a scalable connection among said first stand alone automated sample processing system and said second stand alone automated sample processing system comprises the step of establishing an address-based connection among said first stand alone automated sample processing system and said second stand alone automated sample processing system.

17. (Currently amended): A method of automated sample processing as described in claim 1, ~~5, or 10~~ wherein said step of establishing an isolated electrical connection among said first stand alone automated sample processing system and said second stand alone automated sample processing system comprises the steps of:
- prompting address-based electronic communications programming on a separate full function computer electrically connected to said first stand alone automated sample processing system and said second stand alone automated sample processing system to request specific activity on said first stand alone automated sample processing system;
- transferring said request for specific activity to said first stand alone automated sample processing system across said isolated electrical connection;
- conducting activity on said first stand alone automated sample processing system as a result of said step of prompting electronic communications programming on a separate full function computer;
- prompting address-based electronic communications programming on said first stand alone automated sample processing system to respond to said request for specific activity from said separate full function computer; and
- transferring said response to said request for specific activity to said first stand alone automated sample processing system across said isolated electrical connection.
18. (Original): A method of automated sample processing as described in claim 17 wherein said step of establishing an isolated electrical connection among said first stand alone automated sample processing system and said second stand alone automated sample processing system further comprises the step of establishing a local area network.
19. (Original): A method of automated sample processing as described in claim 18 wherein said step of establishing a local area network electronically comprises the step of incorporating a system having a feature selected from a group consisting of:

an Ethernet element, a token ring element, an arcnet element, a fiber distributed data interface element, an industry specification protocol, a bluetooth-based element, a shared common link element, a transmission control protocol/internet protocol communication element, a packetized information protocol, a shared protocol, a proprietary protocol, and a layered protocol exchange system.

20. (Currently amended): A method of automated sample processing as described in claim 1, ~~5, or 10~~ and further comprising the step of storing historical information.
21. (Original): A method of automated sample processing as described in claim 20 wherein said step of storing historical information comprises the steps of:
storing historical information relative to said first stand alone automated sample processing system on said first stand alone automated sample processing system;
and
storing historical information relative to said second stand alone automated sample processing system on said second stand alone automated sample processing system.
22. (Original): A method of automated sample processing as described in claim 21 and further comprising the step of transferring at least part of said historical information to a separate electronic location.
23. (Original): A method of automated sample processing as described in claim 22 wherein said step of transferring at least part of said historical information to a separate electronic location comprises the step of automatically transferring at least part of said historical information to a separate electronic location when said separate electronic location is available.
24. (Currently amended): A method of automated sample processing as described in claim 1, ~~5, 10, or 20~~ wherein said step of establishing a first stand alone automated sample processing system having an automated process operation

capability that causes automated process operation events through first robotic sample process functions comprises the step of establishing an array of multiple memory elements for said first stand alone automated sample processing system, and wherein said step of establishing at least a second stand alone automated sample processing system having an automated process operation capability that causes automated process operation events through second robotic sample process functions comprises the step of establishing an array of multiple memory elements for said second stand alone automated sample processing system.

25. (Original): A method of automated sample processing as described in claim 24 wherein said step of establishing an array of multiple memory elements for said first stand alone automated sample processing system comprises the step of establishing a mirrored array of multiple memory elements for said first stand alone automated sample processing system, and wherein said step of establishing an array of multiple memory elements for said second stand alone automated sample processing system comprises the step of establishing a mirrored array of multiple memory elements for said second stand alone automated sample processing system.
26. (Currently amended): A method of automated sample processing as described in claim 1, ~~5, or 10~~ wherein said step of automatically processing at least one sample through operation of said first robotic sample process functions comprises the steps of:
interrupting processing through operation of said first robotic sample process functions; and
resuming processing through operation of said first robotic sample process functions,
and wherein said step of automatically processing at least one sample through operation of said second robotic sample process functions comprises the steps of:
interrupting processing through operation of said second robotic sample process functions; and

resuming processing through operation of said second robotic sample process functions.

27. (Original): A method of automated sample processing as described in claim 26 and further comprising the steps of:
changing at least one aspect of sample processing; and
rescheduling robotic sample process functions in response to said step of changing at least one aspect of sample processing.
28. (Original): A method of automated sample processing as described in claim 26 and further comprising the step of applying additional buffer to at least one sample in response to said step of changing at least one aspect of sample processing.
29. (Currently amended): A method of automated sample processing as described in claim 1, ~~5, 10, 20, or 26~~ wherein said step of establishing an isolated electrical connection among said first stand alone automated sample processing system and said second stand alone automated sample processing system comprises the step of establishing a physically separate system connection.
30. (Original): A method of automated sample processing as described in claim 29 wherein said step of establishing an isolated electrical connection among said first stand alone automated sample processing system and said second stand alone automated sample processing system comprises the step of establishing an Internet connection.
31. (Original): A method of automated sample processing as described in claim 29 wherein said step of establishing an isolated electrical connection among said first stand alone automated sample processing system and said second stand alone automated sample processing system comprises the step of establishing an Ethernet connection.

32. (Original): A method of automated sample processing as described in claim 29 wherein said step of establishing an isolated electrical connection among said first stand alone automated sample processing system and said second stand alone automated sample processing system comprises the step of establishing a telephone connection.
33. (Original): A method of automated sample processing as described in claim 29 wherein said step of establishing an isolated electrical connection among said first stand alone automated sample processing system and said second stand alone automated sample processing system comprises the step of establishing a connection to a separate room.
34. (Original): A method of automated sample processing as described in claim 29 wherein said step of establishing an isolated electrical connection among said first stand alone automated sample processing system and said second stand alone automated sample processing system comprises the step of establishing a wireless connection.
35. (Original): A method of automated sample processing as described in claim 29 wherein said step of establishing an isolated electrical connection among said first stand alone automated sample processing system and said second stand alone automated sample processing system comprises the step of establishing a bluetooth-based connection.
36. (Original): A method of automated sample processing as described in claim 29 wherein said step of establishing an isolated electrical connection among said first stand alone automated sample processing system and said second stand alone automated sample processing system comprises the step of establishing an e-mail based connection.

37. (Original): A method of automated sample processing as described in claim 29 wherein said step of establishing an isolated electrical connection among said first stand alone automated sample processing system and said second stand alone automated sample processing system comprises the step of establishing a hardwired connection.
38. (Currently amended): A method of automated sample processing as described in claim 1, ~~5, or 10~~ and further comprising the step of connecting said isolated electrical connection to an external network.
39. (Original): A method of automated sample processing as described in claim 38 and further comprising the step of establishing an isolation functionality between said isolated electrical connection and said external network.
40. (Original): A method of automated sample processing as described in claim 38 wherein said step of connecting said isolated electrical connection to an external network comprises the step of connecting said isolated electrical connection to an office network.
41. (Currently amended): A method of automated sample processing as described in claim 38 ~~[[or 40]]~~ wherein said step of connecting said isolated electrical connection to an external network comprises the step of connecting said isolated electrical connection to a laboratory information system.
- 42 – 223. (Canceled)